DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

N674464869

FACILITY: RIVERSIDE - FONTINALIS	SRN / ID: N6744				
LOCATION: SW/4, NE/4, SEC 25 CO	DISTRICT: Gaylord				
CITY: VANDERBILT		COUNTY: OTSEGO			
CONTACT: Natalie Schrader , Environmental Specialist		ACTIVITY DATE: 01/04/2022			
STAFF: Becky Radulski	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT			
SUBJECT: FY22 scheduled inspection and records review					
RESOLVED COMPLAINTS:					

AQD Staff traveled to N6744 Riverside Fontinalis 25 CPF located in Corwith Township, Otsego County for a Full Compliance Evaluation (FCE) scheduled inspection to determine compliance with PTI 1-00E. This is an opt out permit.

The Fontinalis 25 CPF is a natural gas production facility. It processes natural gas from Antrim wells to dehydrate and compress the gas prior to pipeline transport. The facility currently operates 2 compressor engines, a dehy system and storage tanks.

LOCATION

The facility is located on the west side of Cherwinsky Road, just south of Sturgeon Road, approximately 2 miles east of Vanderbilt. The facility is gated and located approximately $\frac{1}{2}$ mile west of Cherwinsky. The gate was unlocked at the time of the inspection.

REGULATORY DISCUSSION

PTI 1-00 issued 4/28/2000, VOIDED 12/13/2000 3 engines.

PTI 1-00A issued 12/13/2000, VOIDED 9/5/2001 added 4th engine.

PTI 1-00B issued 9/5/2001, VOIDED 10/3/2005 changed 4th engine to a rich burn with catalytic converter.

PTI 1-00C issued 10/3/2005, VOIDED 6/24/2008 add condition allowing for engine switch out of equal or lesser emitting; FGFACILITY CO and NOx both over 100 tons. This PTI was not marked as VOID in permit cards and is shown as an active permit. Lansing was contacted, Sue Thelen has updated permit cards to reflect the void date of 6/24/2008, as the equipment at the facility is now covered by PTI 1-00D.

PTI 1-00D permitted 6/24/2008, VOIDED 7/31/17. Revised to opt out of ROP. Remains 4 engines, must monitor RPM daily (SC1.13); Emission factors resort to worse case (75% load factors) if the load through the engines goes below 80%. NOx and CO for FGFACILITY are each 99.9 tpy.

PTI 1-00E issued 7/31/17 and is still active. The permit was revised to only include 2 engines.

This permit contains SC VII.2, which allows for the replacement of the existing engine with one of equivalent or lower emissions without a permit modification. The facility must notify and provide calculations to AQD to demonstrate emissions are no higher

than permitted limits – the replacement engine can be with or without control. Riverside (formerly Breitburn) notified AQD on August 26, 2015 of an equivalent-emitting engine change for EUENGINE1. A Caterpillar 3516 was replaced with a Caterpillar 3516. In 2012, records provided by Riverside/Breitburn identify EUENGINE1 as Unit 1105; while at the facility for this inspection it was noted that the current skid for EUENGINE1 is stamped as 1105, as do current records. Email correspondence with Riverside/ Breitburn indicates they switched out the engine only, not including the metal skid.

The facility is not major for HAPS.

The engines are subject to 40 CFR Part 63, Subpart ZZZZ, while the glycol dehydrator is subject to 40 CFR Part 63, Subpart HH. Subpart HH has not been delegated to EGLE from EPA. Subpart ZZZZ has been delegated to EGLE, however the AQD is not completing compliance determinations for Subpart ZZZZ for area sources at this time.

INSPECTION NOTES

The facility consists of 2 large green compressor buildings and a small green dehy building. The two large buildings are at the far west end of the open area, with the dehy building located between them. Each large building contained one engine and one compressor. The engines, EUENGINE1 and EUENGINE2, are both Caterpillar 3516 and were both operating. No visible emissions or odors were detected, however the engines are louder than typically observed from similar engines at other locations. The loud noise has been noted on previous inspections at this facility.

EUENGINE1 - The west large building contained Unit GCS 1105. The engine is a Caterpillar 3516 and was operating during the inspection. No odors or VE noted from the exhaust. The stack has a silencer and a muffler. Inside the building were blue engine oil tanks and a red used oil tank. The unit was operating as follows:

RPM 1285

Engine Oil Pressure 56 psi

Engine Oil 198 F

Temperature

EUENGINE2 - The east large building contained Unit GCS 1233. The engine is a Caterpillar 3516 and was operating during the inspection. No odors or VE noted from the exhaust. The stack has a silencer and a muffler. Inside the building were blue engine oil tanks and a red used oil tank. The unit was operating as follows:

RPM 1311

Engine Oil Pressure 56 psi

Engine Oil 213 F Temperature

Glycol Dehydrator – There is no table in the PTI for the dehy. The unit was operating, there was steam, no odor detected. There are 3 small tanks located inside containment on the east side of the dehy building. The tanks contained methanol, sulfa clear and corrosion inhibitor.

Tank Farm – There are 4 tanks located in a black lined and bermed containment area on the east end of the open area. The tanks appear to be 400 bbl, and are not labeled. The permit application indicates they are brine storage.

Based on visual estimates, the stack heights for EUEGINE1 and EUENGINE2 meet height and diameter requirements (16 inch maximum diameter, 40 feet minimum height). The engines are loud, even though exhaust for each engine is equipped with a silencer and muffler. The CPF does not have close neighbors, no noise complaints have been entered in the file.

MAERS

The 2021 emissions was reviewed, no concerns noted.

MACES

MACES was reviewed.

RECORDS REVIEW

SC 1.1, 1.2, 1.3, 1.4, VII.5, VII.6 limits CO and NOx for each as follows:

	CO LIMIT(TPY, 12 MONTH ROLLING)	NOX LIMIT (TPY, 12 MONTH ROLLING)	CO REPORTED (TPY, 12 MONTH ROLLING)	NOX REPORTED (TPY, 12 MONTH ROLLING)
EUENGINE1	32.8	45.3	2.5	2.7
EUENGINE2	32.8	45.3	15.9	16.8

SC III.1, VII.2 - requires the facility to submit and maintain a Malfunction Abatement Plan (MAP). The facility has an approved MAP on file. An operator is on site daily. The operator's maintenance chart was reviewed on site for each engine. The two engines are lean burn engines with no add on control. Records were requested and reviewed. No issues.

SC III.2, IV.1, VII.3 – requires the engines to not operate without the control device if equipped with one. Neither engine has add on control so this condition does not apply.

requested at this time. SC V.1 requires NOx and CO testing if requested by AQD. Testing is not being

EUENGINE1 was 9.119 MMCF and 56.969 MMCF for EUENGINE2. SC VII.4requires fuel use to be monitored and recorded monthly. Fuel use for

minimum height of 40 feet. Based on observations during the inspection, the stacks SC VIII.1 and 2 require the stacks to have a maximum diameter of 16 inches, and a

COMPLIANCE DETERMINATION

appears to be in compliance with PTI 1-00E. Based on the site inspection and records review, N6744 Riverside Fontinalis 25 CPF

DATE 7-6-23 SUPERVISOR

NAME Dely Kadubli